

of the entire length, the proportion given in the "Histoire des Poissons." The spines on the opercle and suprascapular also can hardly be called "smaller," as there stated, than those on the orbit and occiput, at least the upper one on the opercle. There are also two soft rays less in the anal. It may be added further, that Mr. Darwin's notes make no mention of the four brilliant rose-coloured spots along the base of the dorsal fin, spoken of by Valenciennes.

The *S. oculata* was discovered by M. Gay at Valparaiso, where Mr. Darwin's specimen also was obtained. It is the only species of this genus on record brought hitherto from South America. It may be stated, however, that Mr. Darwin has a drawing of another species, made by Mr. P. King, found also at Valparaiso, differing from the above in having the spines on the head less developed, and apparently, in some of its characters, approaching the *S. variabilis*. This last is a species inhabiting the sea which separates N. America from Kamtschatka.

AGRIOPUS HISPIDUS. Jen.

PLATE VII. FIG. 2. Twice nat. size.

Fig. 2 a. Nat. size.

Fig. 2 b. Portion of the hispid cuticle magnified.*

A. pallidè rubro-aurantius, dorso nigricante, pinnis nigro-maculatis: corpore hispido, altitudine tertiam partem longitudinis æquante; spinis nasalibus duabus parvis recurvis; vomere dentibus velutinis minutissimis instructo: pinnâ dorsali inæquali, anticè allevatâ, spinis quartâ et quintâ paulo longissimis, succedentibus gradatim diminutis, ultimâ radiis articulatis multò breviori.

D. 17/13; A. 1/8; C. 13, &c.; P. 9; V. 1/5.

LONG. unc. 1. lin. 9.

FORM.—General form resembling that of the *A. torvus*, but the depth much greater, equalling one-third of the entire length, or very nearly. Length of the head somewhat less than the depth of the body. The line of greatest depth passes through the insertion of the pectorals. The profile viewed apart from the superciliary ridges, which are sharp and prominent, falls in a straight but very oblique line from the commencement of the dorsal to the mouth. On each side of the median line of the snout, in advance of the eyes, is a small but sharp spine, directed upwards and backwards. There are also two minute spines on the first suborbital immediately above and behind the end of the maxillary; these are placed one over the other, the uppermost, which is the sharpest and most conspicuous, taking an upward direction like the

* Called by mistake in the plate "magnified scales."

nasal spines, the lowermost, which is blunt and not so obvious, a downward one. Mouth small, without any teeth that can be discerned even with a lens; but a decided roughness can be felt on the vomer, seeming to indicate the presence of minute teeth on that part. The superciliary ridges, already alluded to, are slightly granulated, and terminate behind in two sharp triangular points. The occipital ridges, a ridge on the posterior suborbital immediately beneath the eye, and an interrupted ridge on the temples and suprascapulars, are in like manner granulated, or rather obscurely crenated. The opercle and preopercle are marked with a few striæ, but show neither granulations nor spines. Gill-opening very small. No scales on any part of the head and body; but the whole surface of the latter is hispid with minute bristly appendages to the cuticle, each springing from a minute papilla. There are also a number of fine lines traversing the cuticle in two directions, and forming a kind of net-work. The lateral line commences at the suprascapular, and terminates a little beyond the end of the dorsal, not reaching quite to the caudal; its course is nearly, but not exactly, parallel to the dorsal line, the distance between them being at first one-third, but towards the caudal between one-third and one-fourth of the depth.

Dorsal very much elevated anteriorly, but its height by no means uniform throughout; the first spine one-fourth shorter than the second; this again a little shorter than the third; and this last a very little shorter than the fourth and fifth, which are longest, and which equal three-fourths of the depth of the body; sixth and succeeding ones gradually decreasing, the ninth being about equal to the first, the twelfth about one-third shorter; the next four are scarcely shorter than the twelfth, and the seventeenth or last is a little higher than the sixteenth; then follows the soft portion of the fin, which is here again elevated, the soft rays being nearly double the length of the last spinous.* The anal answers in position to the first two-thirds of the soft dorsal, terminating before that fin, as in *A. torvus*: the fourth, fifth, and sixth soft rays are longest, and much longer than the soft rays of the dorsal; the spine is short and slender, and not much more than half the length of the first soft ray. The last ray of both dorsal and anal is divided quite to the root so as to appear as two. The caudal appears to have been rounded, but the ends of the rays are worn and broken. Pectorals long, equalling one-third of the entire length: they consist of nine rays, the three middle ones of which are longest; the three upper and the three lower ones are respectively equal; all the rays simple. Ventrals much shorter than the pectorals, and, though attached rather more behind, not reaching so far; their spine is rather stout, much more so than that of the anal, and about three-fourths the length of the first two soft rays, which are the longest in the fin.

COLOUR.—"Pale reddish orange, with black spots on the fins, and a dusky shade on the back."—D.

A second specimen only differs from the above in having the teeth in the jaws more sensible to the touch, though still scarcely to be seen; and in the superciliary and occipital ridges being less granulated or crenated at the edges. The colours also are a little darker. The fin-ray formula is exactly the same in both specimens.

Habitat, Peninsula of Tres Montes, Archipelago of Chiloe.

This species approaches most nearly the *A. Peruvianus* of Cuvier and Valenciennes, with which it agrees in the great depth of the body, and in the

* This portion of the fin is not quite correctly represented in the plate, being made too low, in consequence of the rays having been broken at their extremities in the specimen figured.